

Remarks

A. Status of the Claims

There are no amendments to the claims.

Claims 1 – 48 are pending. Claims 1-34 are pending and elected following a restriction requirement. Claims 35 – 48 are withdrawn, pending rejoinder.

B. Response to the Office Action

There were 6 items noted in the Office Action Summary. They will be addressed here in the same order they appeared in the Office Action.

1. Information Disclosure Statement

Applicant was reminded that unless a reference has been cited by an examiner on a form PTO-892, it has not been formally considered by the USPTO.

Applicant is submitting a Supplemental Information Disclosure Statement, to the Patent Office, with four items.

2. Copending Applications

Applicant was reminded that other copending US patent applications that are “material to patentability” of the application under examination must be brought to the attention of the patent examiner.

Applicant has several patent applications pending before the USPTO which claim a variety of compounds that are useful for treating diseases related to biochemical pathways that involve TGF β responsive genes and their proteins. Applicant’s applications related to compounds for affecting TGF β pathways are listed in Table 1 below, next page.

Table 1:

TITLE	Docket #	SERIAL #	STATUS
Tri-substituted Heteroaryls and Methods of Making and Using the Same (TGFBeta Imidazole)	223255/A158US/120994	10/510,459	Issued US 7,612,094
Imidazolopyridines and methods of making and using the same (TGFBeta Imidazolopyridine)	223255/A166US/121058	10/526,653	Instant application. Subject of this Office Action
Pyrazolopyridines and methods of making and using the same (TFBeta Pyrazolopyridine)	223255/A165US/121026	10/526,839	Pending Response to non- final filed
Pyrazoles and methods of making and using the same	223255/A179US/121090	10/545,179	Abandoned Petition to Revive pending
Pyrimidinylimidazoles And Methods Of Making And Using The Same	223255/A180US121107	11/661,485	Abandoned
Pyrimidinylpyrazoles as Tgf-Beta Inhibitors	223255/P0602US/121427	11/661,531	Pending Non-final action mailed
Substituted Pyrazalones (TGFBeta Pyrazolone)	223255/P0614US/121447	12/085,380	Pending Pre exam processing
Transforming Growth Factor Modulators (TGFBeta Fused Tricyclic Compounds)	223255/P0616US/121452	12/086,875	Pending Pre exam processing
TGFBeta Spiro Tricyclic Compounds	223255/P0647US/121458	12/086,954	Pending

3. Specification

Applicant was reminded that the specification was not checked for errors.

Applicant has no amendments to make to the specification at this time.

4. 35 USC § 103(a) Obviousness Rejection

The Examiner has rejected claims 1-34 under 35 U.S.C. 103(a) as being unpatentable over WO 00/26216 (Campbell). Applicant disagrees for the reasons set forth below.

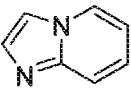
In making this rejection, the Examiner contends that Campbell teaches “**pyrazolopyridine** compounds which generically embrace [the] presently claimed invention.” Office Action at page 4. Specifically, the Examiner points to compounds of Formula I and Formula IV on page 12 of Campbell. Indeed, Campbell does disclose **pyrazolopyridine** compounds for use as COX-2 inhibitors. Applicant’s claims, on the other hand, recite **imidazolopyridine-like** compounds further substituted by at least pyridine and pyrimidine ring or two pyridine rings.

The Formula in Figure A below, from Formula I of Applicant’s invention, illustrate two orientations of the Formula from claim 1 of the instant application.

Figure A:

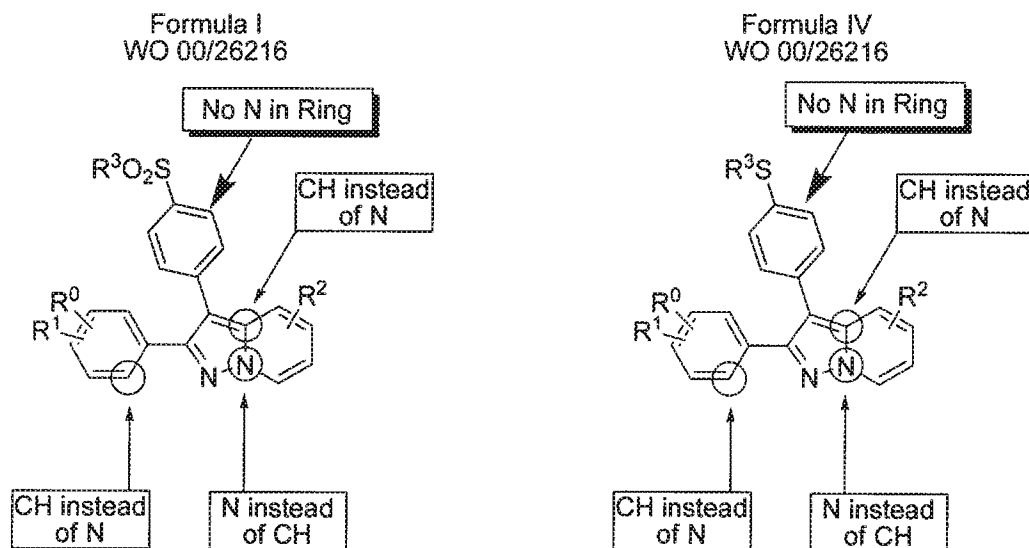


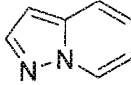
Formula I as recited in claim 1

Formula I of claim 1, under examination, must contain a pyridine ring in the structure, and the core fused ring system is an imidazo[1,2-a]pyridine , when X_1 , X_2 , X_3 , and X_4 are all CH.

Compare the formula and structures in **Figure A**, above, to the structures of Formula I and IV of WO 00/26216 (Campbell), which are shown below, next page, in **Figure B**.

Figure B: Formulas I (left) and IV (right) from WO 00/26216 (Campbell), are shown below.



First, the core fused ring system in Campbell is a pyrazolo[1,5-a]pyridine, ; whereas, claims 1-48 require an imidazo[1,2-a]pyridine-like fused ring system.

Second, Campbell's pyrazolo[1,5-a]pyridine ring system is substituted with two phenyl rings; whereas, claims 1-34 require an imidazo[1,2-a]pyridine-like fused ring system be substituted with a pyridine ring and a pyrimidine ring or two pyridine rings. In **Figure B**, above, the specific structural differences between Applicant's compounds and the compounds disclosed in Campbell are shown circled and exemplified by boxes and explanatory arrows. There are at least **four** major structural differences between the compounds claimed by Applicant and the compounds disclosed in Campbell.

The Office Action provides no reason or suggestion why the **four** changes noted above should be made to the compounds in Campbell in order to arrive at the compounds recited by the pending claims. Moreover, Campbell's compounds are COX-2 inhibitors. COX-2 inhibitors have different receptor sites when compared to compounds recited by the pending claims, which are intended to treat diseases and disorders related to TGF β responsive genes and their proteins. As a result, one skilled in the art would not have been motivated to alter the compounds of Campbell with the reasonable expectation that

such modifications would result in a COX-2 inhibitor, let alone a TGF β inhibitor. Small differences in a chemical structure can produce unpredictable properties. See, *In re Raymond C. Grabiak*, et al. (Fed. Cir. 1985) 226 USPQ 870, 769 F.2d 729, where the substitution of a sulfur atom for an oxygen atom in a compound was considered to be a great enough difference that one compound could not be considered obvious in view of the other. See also, *Takeda v Alphapharm* 492 F.3d 1350 at 1359 (Fed Cir. 2007), where the court explained, "Thus, in cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish prima facie obviousness of a new claimed compound." See also, *Eisai v. Dr. Reddy* 533 F.3d 1353 (Fed Cir. 2008) where a structurally similar compound (5 position methyl substituted pyridyl ring compared to a similar 6 position ethyl substituted pyridyl ring) used for a similar purpose did not make a similar later discovered compound obvious. The *Eisai* Court explained, "post-KSR, a prima facie case of obviousness for a chemical compound still, in general, begins with the reasoned identification of a lead compound.

For at least the foregoing reasons, Applicant contends that claims 1-48 are patentable over Campbell. Applicant respectfully requests reconsideration and withdrawal of this rejection.

5. Response to Remarks

Applicant's election of group I (claims 1-34) is acknowledged and Applicant maintains the request to allow the method claims upon rejoinder, once the compound claims are examined and found allowable.

6. Communication

Applicant welcomes the contact information.

Conclusion

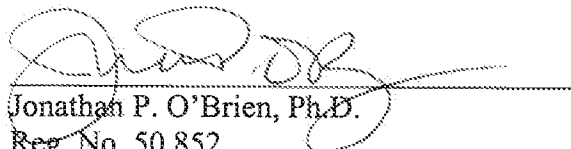
Applicant is aware of no art that requires a conclusion of obviousness for the claimed compounds, and therefore Applicant looks forward to allowance of the pending compound claims.

EXTENSION OF TIME UNDER 37 CFR § 1.17

This is a response to an Office Action mailed on or before August 18, 2009, as such it is timely filed and no extension of time should be needed. Should the USPTO believe an extension of time under 37 C.F.R. § 1.17 is needed to consider this response, in order to continue prosecution, please take such charges from Deposit Account No 503145, referencing attorney docket number 223255/A166US/121058, and advise the attorney below of the charge immediately.

Respectfully submitted,

Date: Nov. 17, 2009


Jonathan P. O'Brien, Ph.D.
Reg. No. 50,852

Honigman Miller Schwartz and Cohn LLP
444 West Michigan Avenue
Kalamazoo, MI 49007
Telephone: (269) 337-7838
Facsimile: (269) 337-7839

KALAMAZOO.37704.6